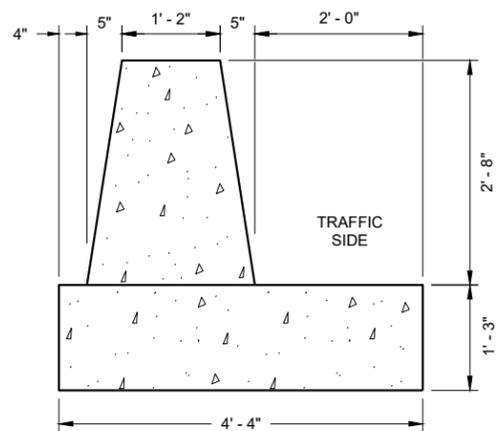
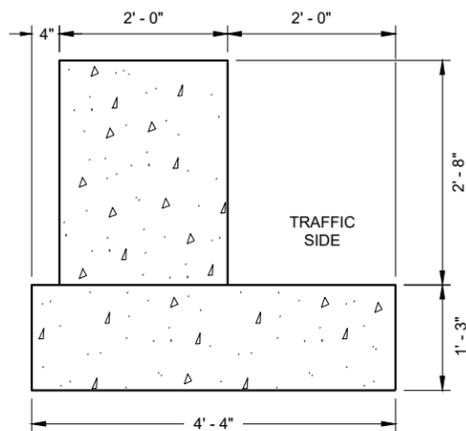
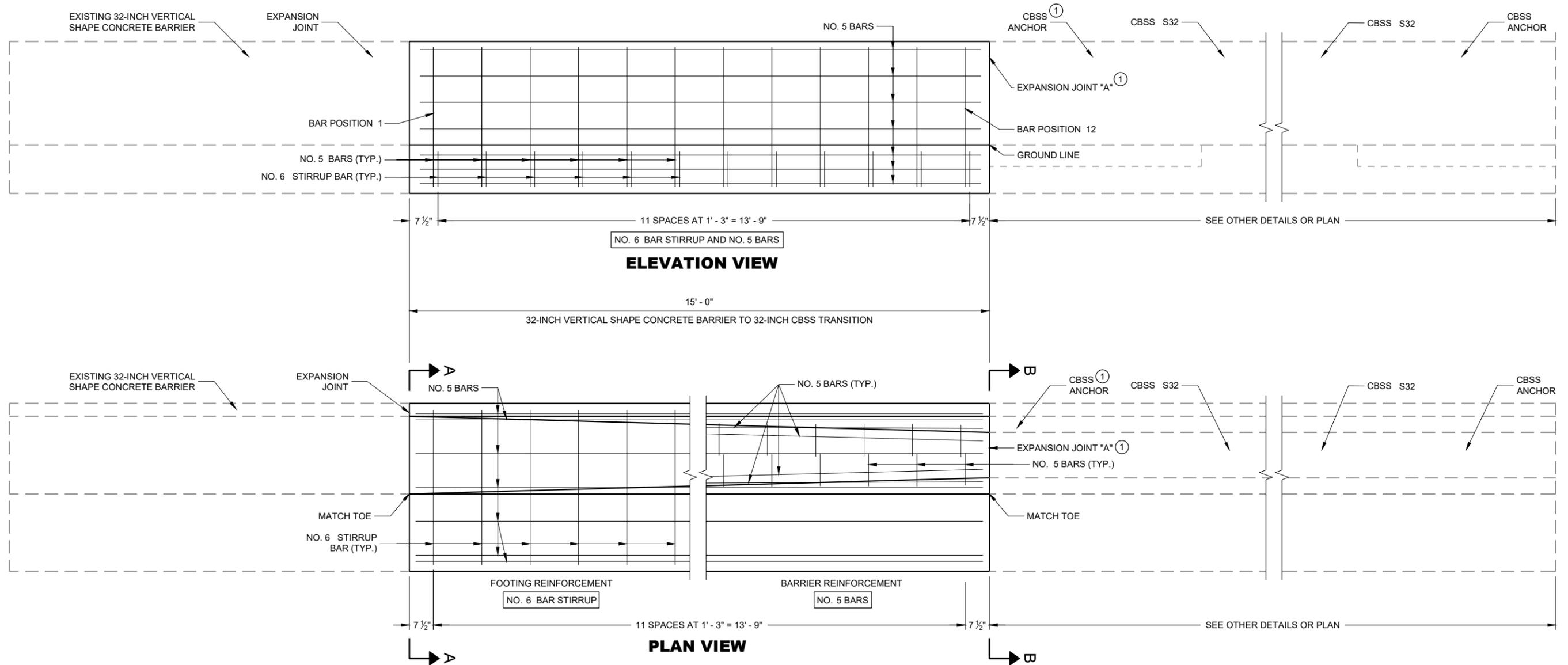




SDD 14B40-a 32-Inch Vertical Shape Concrete Barrier to 32-Inch Single Slope Concrete Barrier Transition

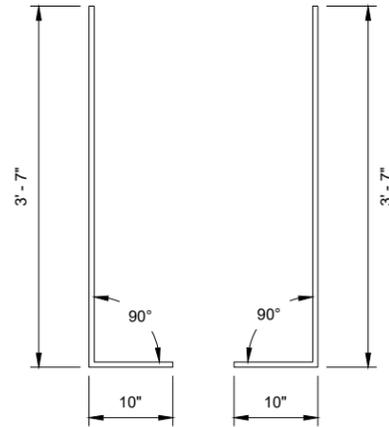


GENERAL NOTES

- CONSTRUCT PER STANDARD SPECIFICATION 603.
- SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.
- 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.
- USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
- THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.
- 2" CLEAR COVER TYPICAL.
- ① EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

**32-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
32-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

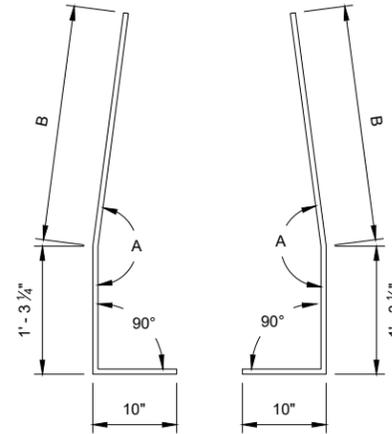
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



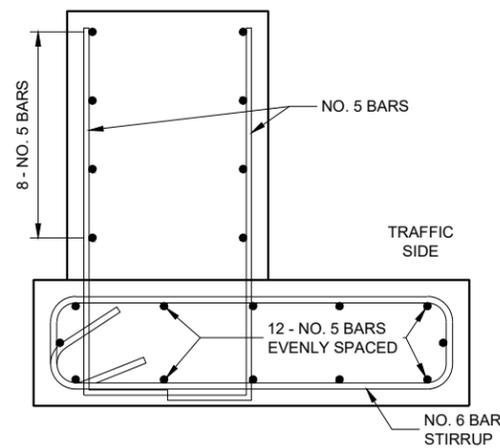
**BENDING DETAIL
BARS 1**

**BAR CHART
BAR POSITIONS
2 - 12**

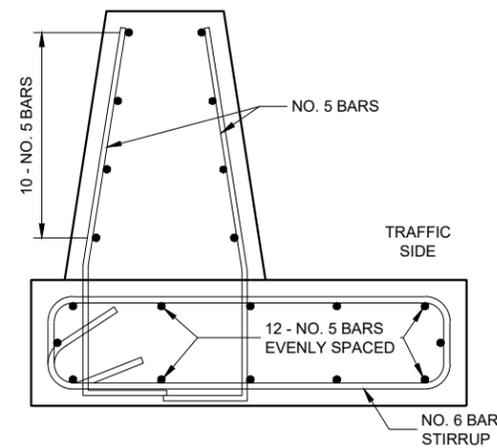
BAR	A	B
2	179°	2' - 3 3/4"
3	178°	2' - 3 3/4"
4	177°	2' - 3 3/4"
5	176°	2' - 4"
6	175°	2' - 3 3/4"
7	175°	2' - 3 3/4"
8	174°	2' - 3 3/4"
9	173°	2' - 3 3/4"
10	172°	2' - 4"
11	172°	2' - 4"
12	171°	2' - 4"



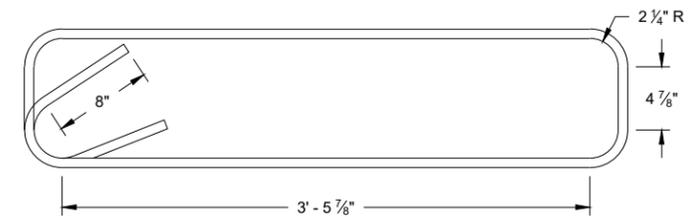
**BENDING DETAIL
BARS 2 - 12**



**BAR DETAIL
BAR POSITION 1**



**BAR DETAIL
BAR POSITIONS 2 - 12**



**STIRRUP BAR
BENDING DETAIL**

**32-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
32-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

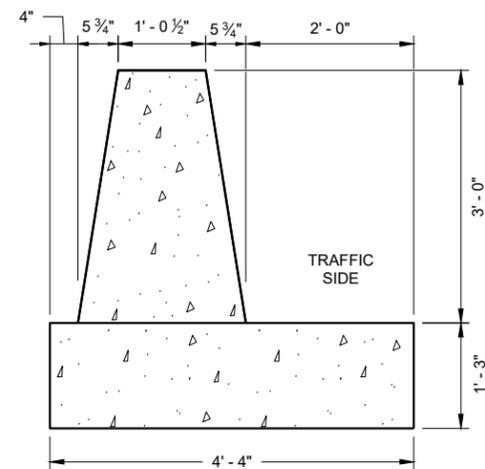
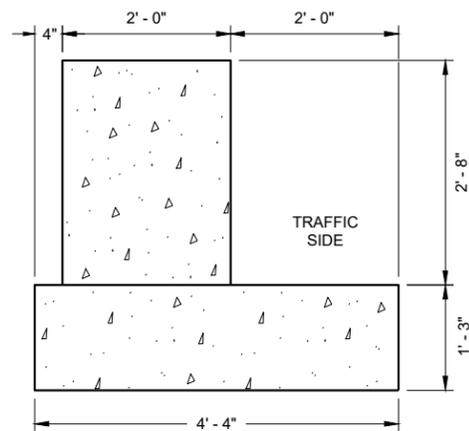
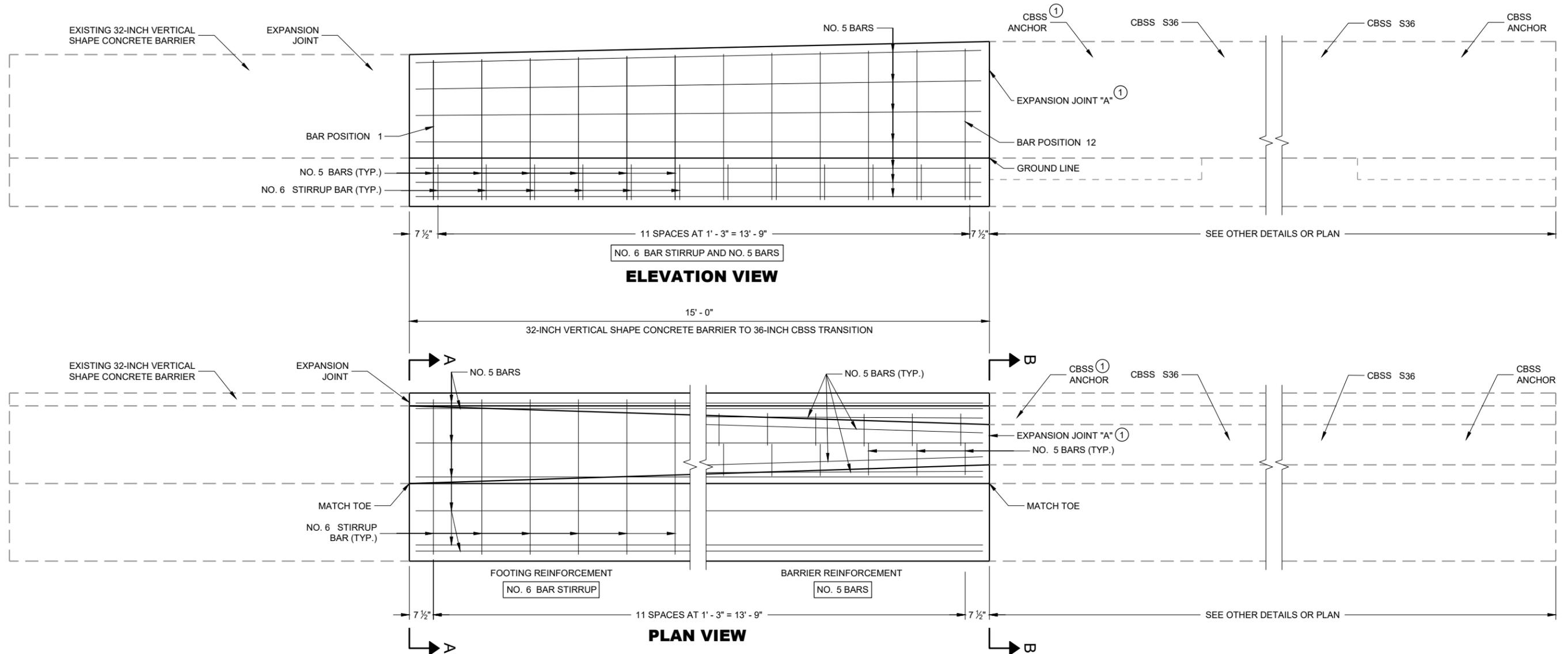
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APPROVED
February 2020 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA



SDD 14B40-c 32-Inch Vertical Shape Concrete Barrier to 36-Inch Single Slope Concrete Barrier Transition



GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.

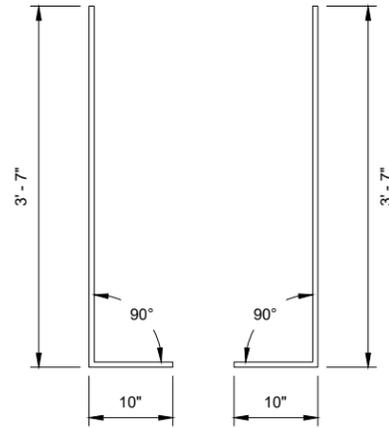
THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

① EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

**32-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
36-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

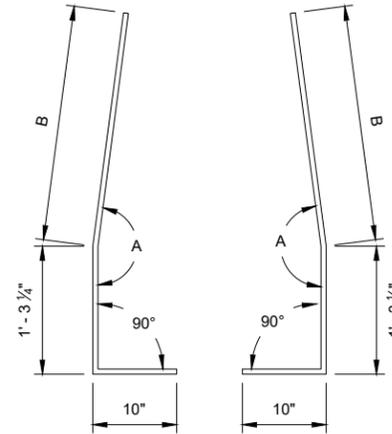
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



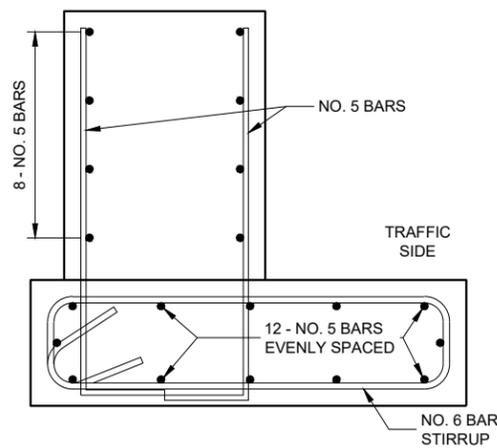
**BENDING DETAIL
BAR 1**

**BAR CHART
BAR POSITIONS
2 - 12**

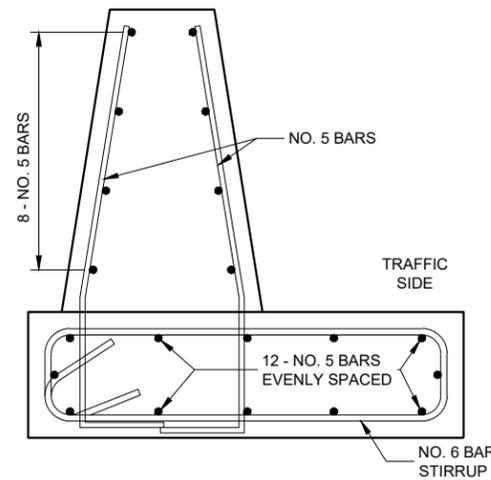
BAR	A	B
2	179°	2' - 4 1/4"
3	178°	2' - 4 1/2"
4	177°	2' - 4 3/4"
5	176°	2' - 5 1/4"
6	175°	2' - 5 1/2"
7	175°	2' - 6"
8	174°	2' - 6 1/4"
9	173°	2' - 6 3/4"
10	173°	2' - 7 1/4"
11	172°	2' - 7 1/2"
12	171°	2' - 8"



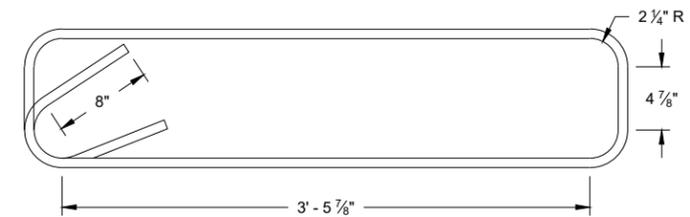
**BENDING DETAIL
BARS 2 - 12**



**BAR DETAIL
BAR POSITION 1**



**BAR DETAIL
BAR POSITIONS 2 - 12**



**STIRRUP BAR
BENDING DETAIL**

**32-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
36-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

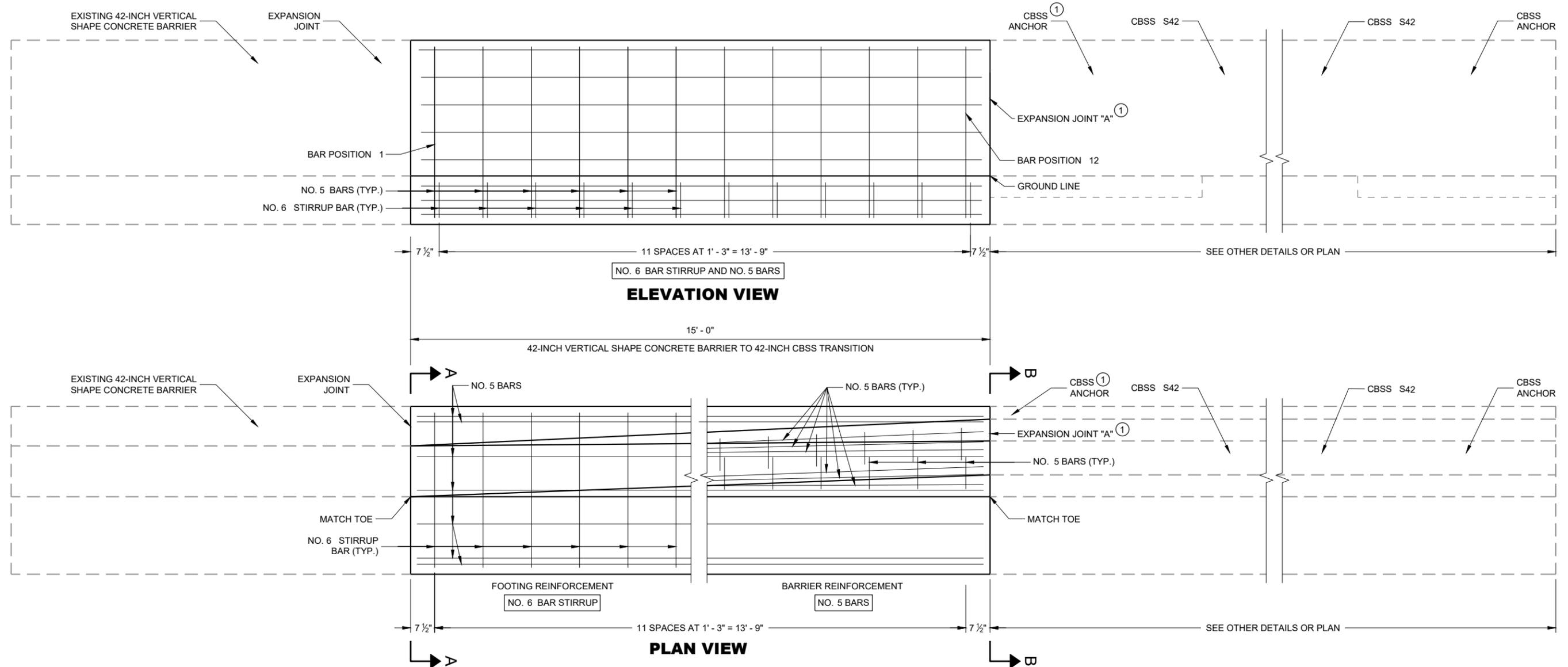
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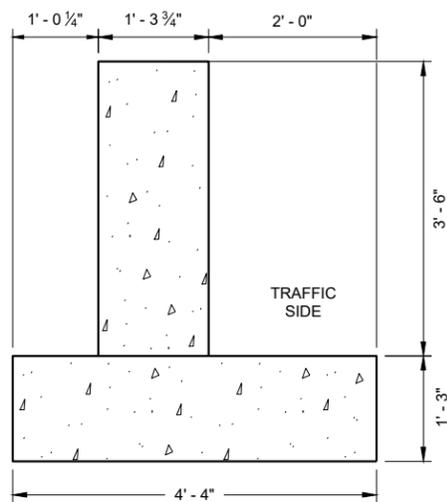


SDD 14B40-e 42-Inch Vertical Shape Concrete Barrier to 42-Inch Single Slope Concrete Barrier Transition

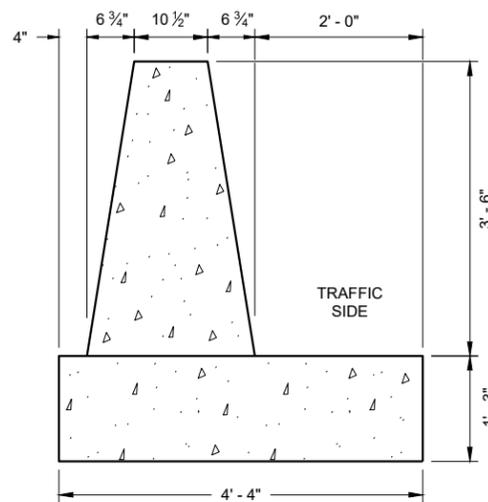


6

6



SECTION A - A



SECTION B - B

GENERAL NOTES

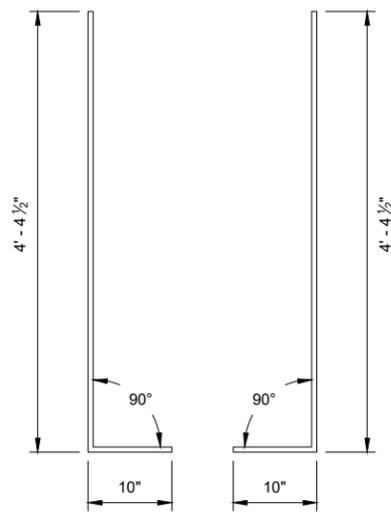
- CONSTRUCT PER STANDARD SPECIFICATION 603.
- SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.
- 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.
- USE 3/8" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
- THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.
- 2" CLEAR COVER TYPICAL.
- ① EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

**42-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
42-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B40 - 02e

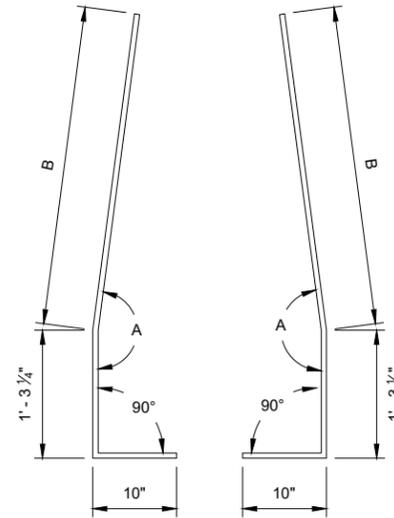
SDD 14B40 - 02e



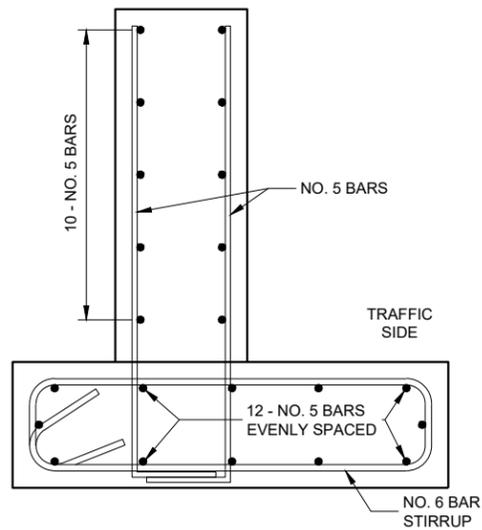
**BENDING DETAIL
BAR 1**

**BAR CHART
BAR POSITIONS
2 - 12**

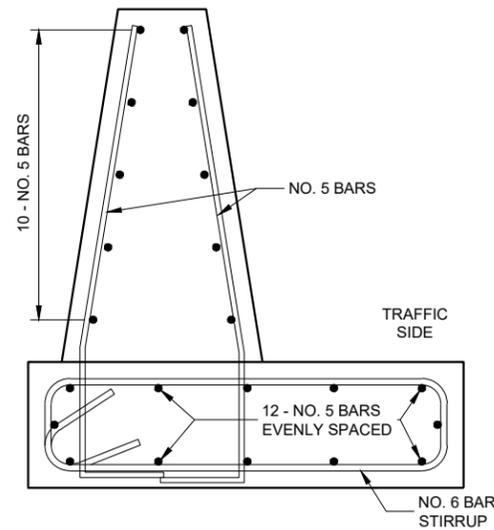
BAR	A	B
2	179°	3' - 1 3/4"
3	178°	3' - 1 3/4"
4	177°	3' - 1 3/4"
5	176°	3' - 2"
6	175°	3' - 1 3/4"
7	175°	3' - 1 3/4"
8	174°	3' - 1 3/4"
9	173°	3' - 2"
10	172°	3' - 2"
11	172°	3' - 2"
12	170°	3' - 2 1/4"



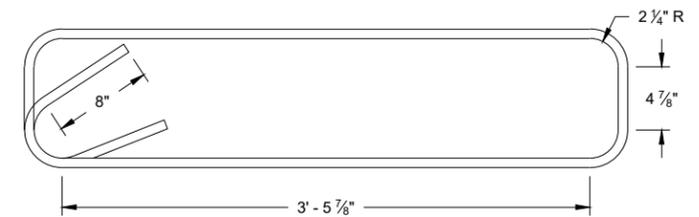
**BENDING DETAIL
BAR 2 - 12**



**BAR DETAIL
BAR POSITION 1**



**BAR DETAIL
BAR POSITIONS 2 - 12**



**STIRRUP BAR
BENDING DETAIL**

**42-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
42-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

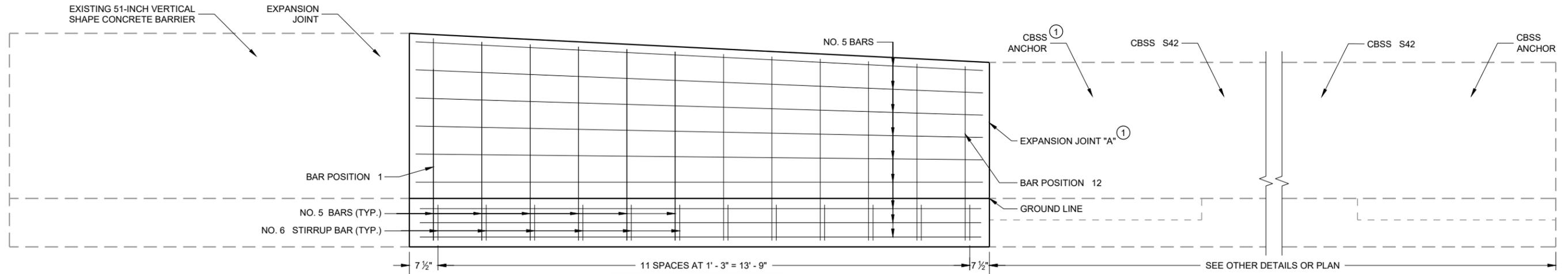
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February 2020 /S/ Rodney Taylor
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ENGINEER

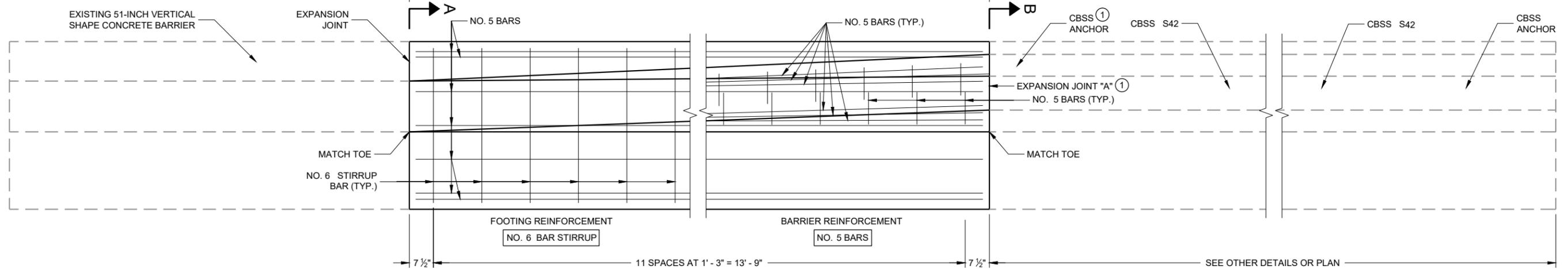
FHWA



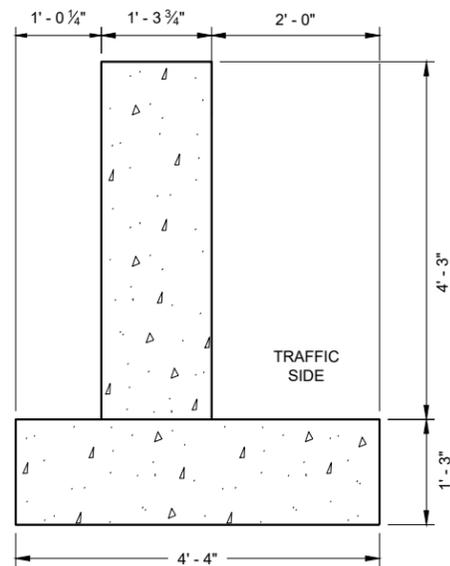
SDD 14B40-g 51-Inch Vertical Shape Concrete Barrier to 42-Inch Single Slope Concrete Barrier Transition



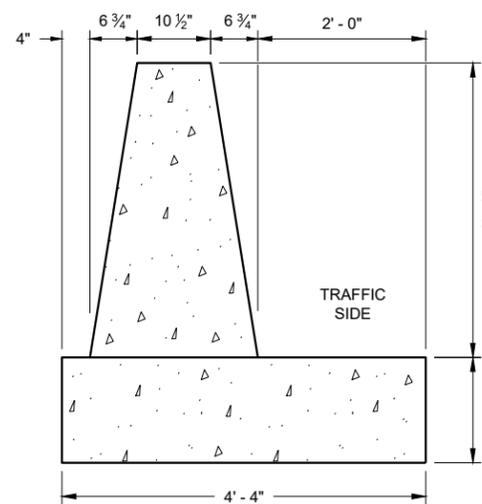
ELEVATION VIEW



PLAN VIEW



SECTION A - A



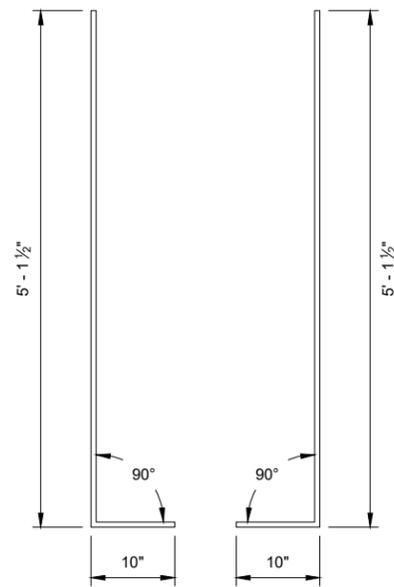
SECTION B - B

GENERAL NOTES

- CONSTRUCT PER STANDARD SPECIFICATION 603.
- SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.
- 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.
- USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
- THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.
- 2" CLEAR COVER TYPICAL.
- ① EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

**51-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
42-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

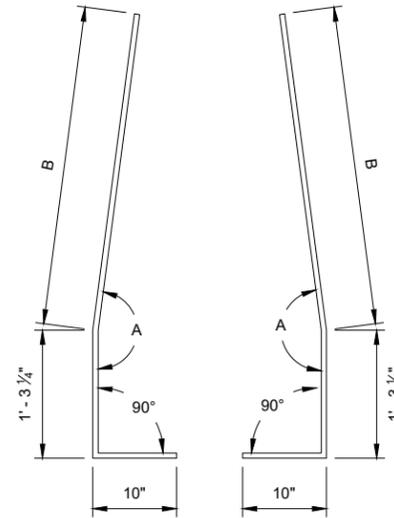
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



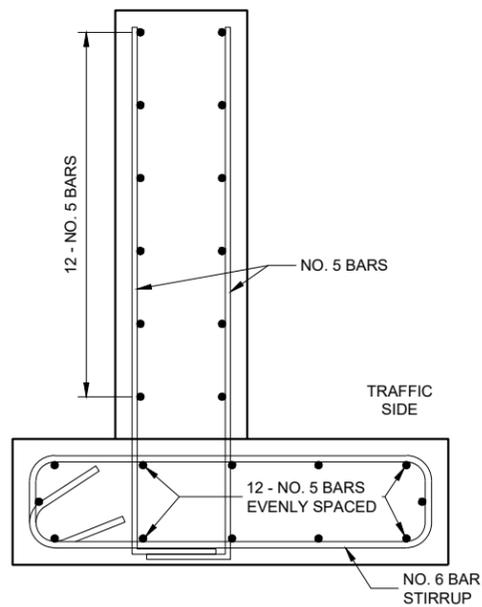
**BENDING DETAIL
BAR 1**

**BAR CHART
BAR POSITIONS
2 - 12**

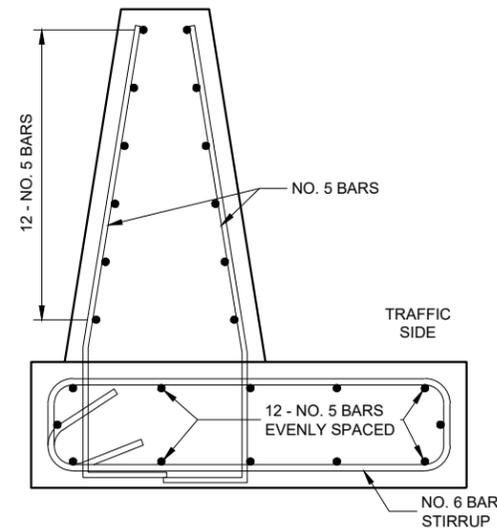
BAR	A	B
2	179°	3' - 9 1/2"
3	178°	3' - 8 3/4"
4	177°	3' - 8"
5	176°	3' - 7 1/2"
6	176°	3' - 6 3/4"
7	175°	3' - 6"
8	174°	3' - 5 1/4"
9	173°	3' - 4 1/2"
10	172°	3' - 3 3/4"
11	172°	3' - 3 3/4"
12	171°	3' - 2 1/2"



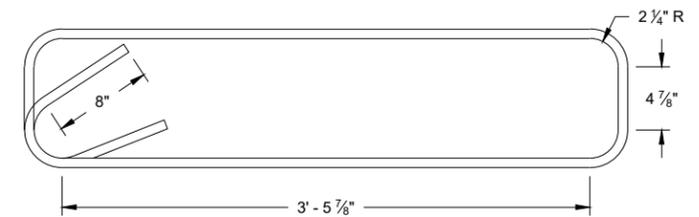
**BENDING DETAIL
BARS 2 - 12**



**BAR DETAIL
BAR POSITION 1**



**BAR DETAIL
BAR POSITIONS 2 - 12**



**STIRRUP BAR
BENDING DETAIL**

**51-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
42-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

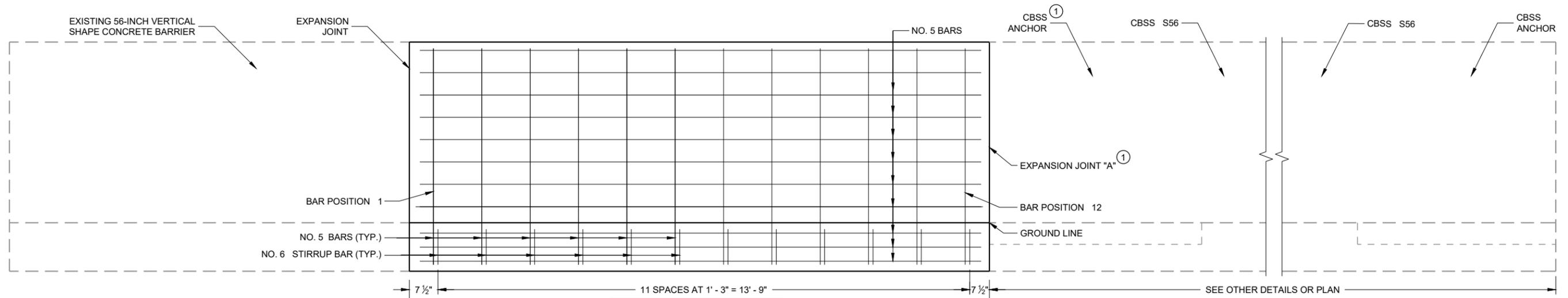
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER

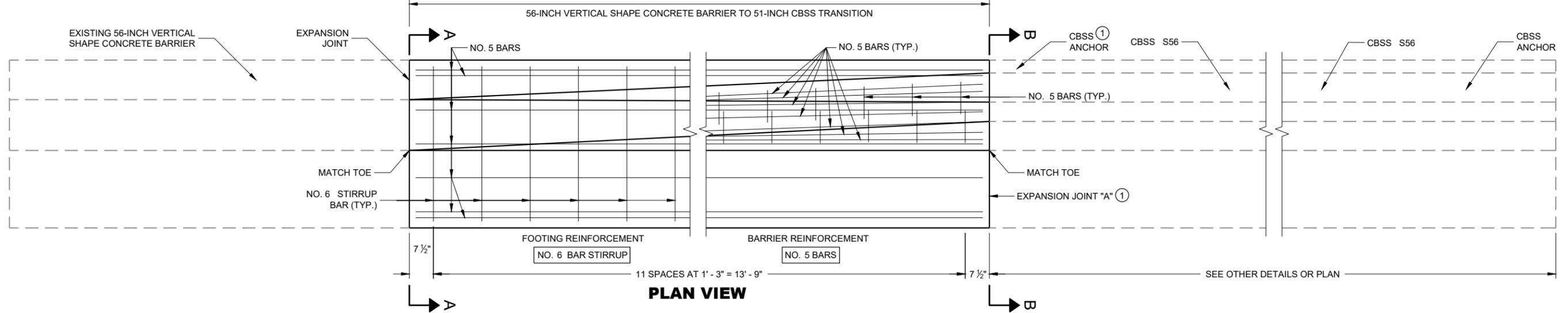
FHWA



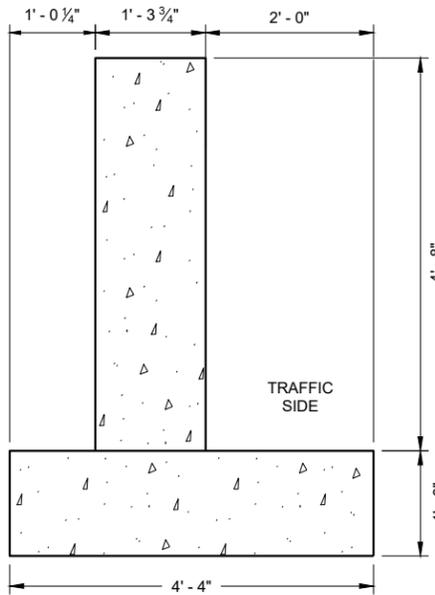
SDD 14B40-i 56-Inch Vertical Shape Concrete Barrier to 56-Inch Single Slope Concrete Barrier Transition



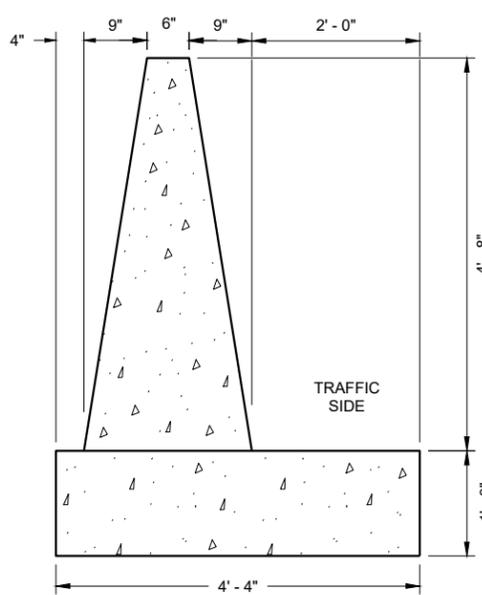
ELEVATION VIEW



PLAN VIEW



SECTION A - A



SECTION B - B

GENERAL NOTES

- CONSTRUCT PER STANDARD SPECIFICATION 603.
- SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS OTHERWISE NOTED.
- 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.
- USE 3/4" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
- THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.
- 2" CLEAR COVER TYPICAL.
- ① EXPANSION JOINT "A" MAY BE REPLACED WITH A COLD JOINT PROVIDED THAT 3 FEET OF LAP OF LONGITUDINAL STEEL IS PROVIDED. IF COLD JOINT IS USED, ANCHOR IS NOT REQUIRED.

**56-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
56-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

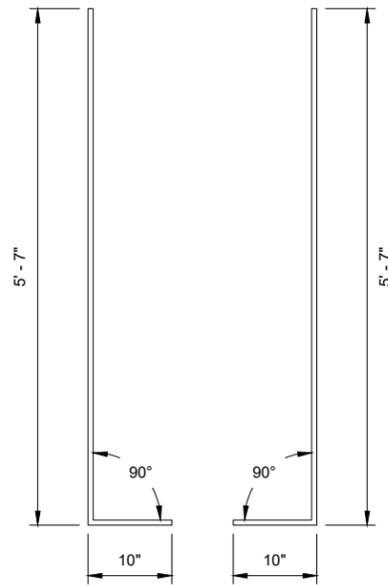
STATE OF WISCONSIN
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6

6

SDD 14B40 - 02i

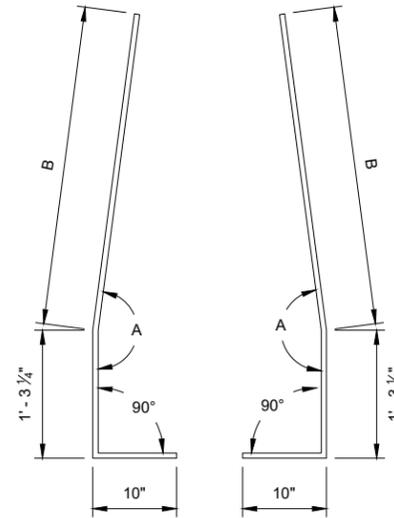
SDD 14B40 - 02i



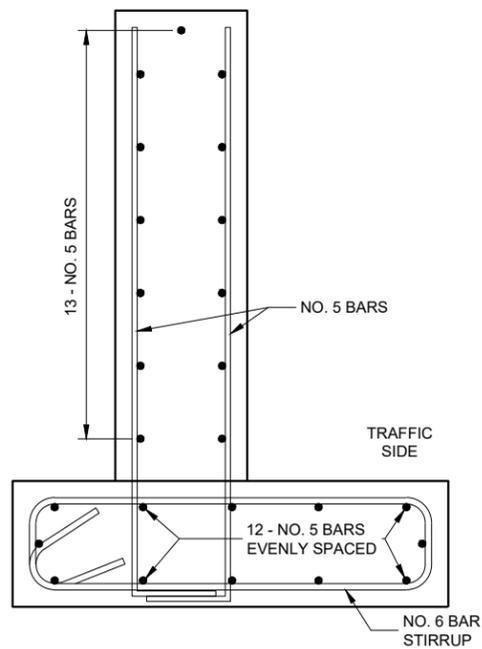
**BENDING DETAIL
BAR 1**

**BAR CHART
BAR POSITIONS
2 - 12**

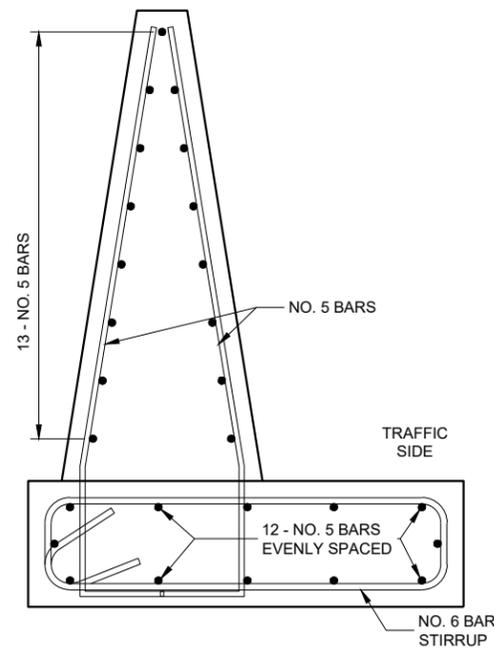
BAR	A	B
2	179°	4' - 3 3/4"
3	178°	4' - 3 3/4"
4	177°	4' - 3 3/4"
5	176°	4' - 3 3/4"
6	176°	4' - 3 3/4"
7	175°	4' - 4"
8	174°	4' - 4"
9	173°	4' - 4"
10	172°	4' - 4"
11	172°	4' - 4 1/4"
12	171°	4' - 4 1/2"



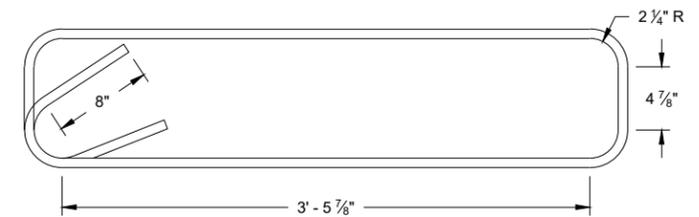
**BENDING DETAIL
BARS 2 - 12**



**BAR DETAIL
BAR POSITION 1**



**BAR DETAIL
BAR POSITIONS 2 - 12**



**STIRRUP BAR
BENDING DETAIL**

**56-INCH VERTICAL SHAPE
CONCRETE BARRIER TO
56-INCH SINGLE SLOPE
CONCRETE BARRIER TRANSITION**

STATE OF WISCONSIN
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February 2020 /S/ Rodney Taylor
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ENGINEER

FHWA

Vertical Faced Concrete Barrier to Single Slope Concrete Barrier Transitions

References:

NONE

Bid items associated with this drawing:

Bid items for single slope barrier and associated transitions are encoded as follows:

BARRIER BID ITEM TYPES		DESCRIPTION	CODE
<p><i>example: Concrete Barrier Type S36A is a 36" single sloped median retaining wall barrier</i></p>	SHAPE	New Jersey shape	NJ
		F shape	F
		Vertical	V
		Single slope barrier	S
TRANSITION BID ITEM TYPES		Standard barrier section	none
<p><i>example: Concrete Barrier Transition Type F32SF to S32 is a transition from 32" single faced F barrier to a 32" single sloped barrier</i></p>	CLASS	Median retaining wall	A
		Short barrier section	B
		Roadside retaining wall	C
		FACES	Double faced barrier
Single faced barrier	SF		

<u>ITEM NUMBER</u>	<u>DESCRIPTION</u>	<u>UNIT</u>
603.3611	Concrete Barrier Transition Type V32 to S32.....	EACH
603.3613	Concrete Barrier Transition Type V32 to S36.....	EACH
603.3655	Concrete Barrier Transition Type V42 to S42.....	EACH
603.3675	Concrete Barrier Transition Type V51 to S42.....	EACH
603.3699	Concrete Barrier Transition Type V56 to S56.....	EACH
603.3600 - 3699	Concrete Barrier Transition (type).....	EACH

Standardized Special Provisions associated with this drawing:

<u>STSP NUMBER</u>	<u>TITLE</u>
NONE	

Other SDDs associated with this drawing:

- [SDD 14B32](#) Concrete Barrier Single Slope
- [SDD 14B34](#) Short Concrete Barrier Sections (Use for runs of less than 40')

Design Notes:

Use these details when a transition from a vertical faced barrier to a single slope barrier is needed.

Contact Person:

Erik Emerson (608) 266-2842